CLAIMS: -

- A non-infectious nucleic acid construct encoding a recombinant antibody molecule, said construct being adapted
 for the *in vivo* establishment of a protective immunity to an infectious disease in an animal.
- A non-infectious nucleic acid construct encoding a recombinant antibody molecule, said construct is formulated
 for the *in vivo* prevention of an allergic reaction to an allergen in an animal.
- 3. A non-infectious nucleic acid construct encoding a recombinant antibody molecule, wherein said construct is formulated for the *in vivo* prevention of a reaction caused by the presence of a toxic substance in an animal.
- 4. A construct according to claim 1 wherein the antibody molecule is derived from an antibody raised against the 20 pathogen causing the disease.
 - 5. A construct according to claim 2 wherein the antibody molecule is derived from an antibody raised against the allergen.

25

- 6. A construct according to claim 2 wherein the antibody molecule is derived from an antibody raised against IgE molecules.
- 30 7. A construct according to claim 3 wherein the antibody molecule is derived from antibodies raised against the toxic substance.

BEST AVAILABLE COPY

- 8. A construct according to claim 7 wherein the toxic substance is a venom or toxin produced by a poisonous organism.
- 9. A construct according to any preceding claim wherein the antibody molecule comprises variable domains of immunoglobulin Heavy and Light chain linked together by a linker sequence.
- 10. A construct according to any preceding claim further 10 comprising a genetic sequence encoding secretion signal peptide.
 - 11. A construct according to any preceding claim formulated for delivery by injection, spray or gene gun.

15

- 12. A construct according to any preceding claim comprising genes encoding an antibody molecule to several different epitopes on a given pathogen, allergen, or toxin.
- 20 13. A construct according to any preceding claim comprising genes encoding an FV antibody gene-expression library to a given pathogen, allergen, or toxin.
- 14. A construct according to any preceding claim including 25 a viral haemorrhagic septicaemia virus VHSV-neutralising monoclonal antibody 3F1H10 with two amino acids substituents in the H-chain gene respectively Asn 35a to Thr and Lys 64 to Thr and with the secretion signal of rainbow trout transforming growth factor (TGF-beta) added to the 5' end of 30 the gene.
 - 15. A method of treating an animal comprising administering thereto a construct as claimed in any of claims 1 to 14.

BEST AVAILABLE COPY

16. A pharmaceutical composition comprising a construct as claimed in any one of claims 1 to 14.

BEST AVAILABLE COPY